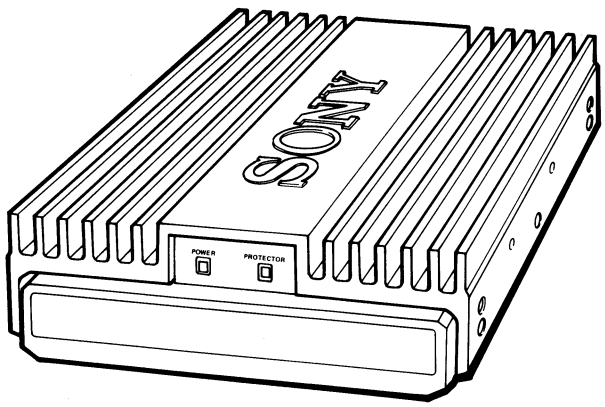
XM-801

SERVICE MANUAL

US Model
Canadian Model
E Model
AEP Model



SPECIFICATIONS

Audio power specifications

Power output and total harmonic distortion
80 watts per channel minimum continuous average power into 4 ohms, both channels driven from 20-20,000 Hz with no more than 0.5% total harmonic distortion per Car Stereo Ad Hoc Committee standards.

Other Specifications

Power supply system
Pulse power supply circuitry
Input — Car stereo input (phono jack)
Outputs — Speaker outputs
Speaker impedance
2-8 ohms
Maximum power output
160 watts per channel minimum RMS at 4 ohms*
320 watts (monaural) at 4 ohms*
Frequency response
3-150,000 Hz $^{+0}_{-3}$ dB (4 ohms, 1 W)
Harmonic distortion
0.005% (at 1 kHz, 4 ohms, 40 W)
Signal-to-noise ratio
108 dB (A-weighted)
Input level adjustment range
0.1-2 V

Power requirements
12 V DC car battery (negative ground)
Current drain — 30 A (at maximum output)
Mounting dimensions
Approx. 178 × 57.2 × 361 mm (w/h/d)
(7 1/8 × 2 3/8 × 14 1/4 inches)
Weight — Approx. 4.2 kg (9 lb 4 oz)
Accessories supplied
Mounting hardware (1 set)
Terminal cover (1)

* Measured at 14.4 V

MICROFILM

STEREO POWER AMPLIFIER

SONY®

SECTION 1
OUTLINE

FEATURES

- Maximum power output of 160 watts per channel.
- Power output of 80 watts per channel. (20-20,000 Hz, 0.5%, 4 ohms) Ad Hoc Committee standard.
- Wide dynamic range and low distortion (less than 0.005%).
- Equipped with an originally developed flat chemical condenser for powerful reproduction of lower frequencies.
- The OPERATION switch allows the XM-801 to be used as a monaural amplifier.
- A remote power system automatically switches the amplifier on when a connected car stereo is turned on.
- A protection circuit is provided.
- Pulse power supply* for stable, regulated output power.

*** Pulse power supply**
This amplifier employs pulse techniques in its power supply section. The use of this original light-weight power supply system provides a high-voltage, a high-efficiency power supply. That is highly regulated under variations in the automobile's electrical voltage.

CONNECTIONS

Caution

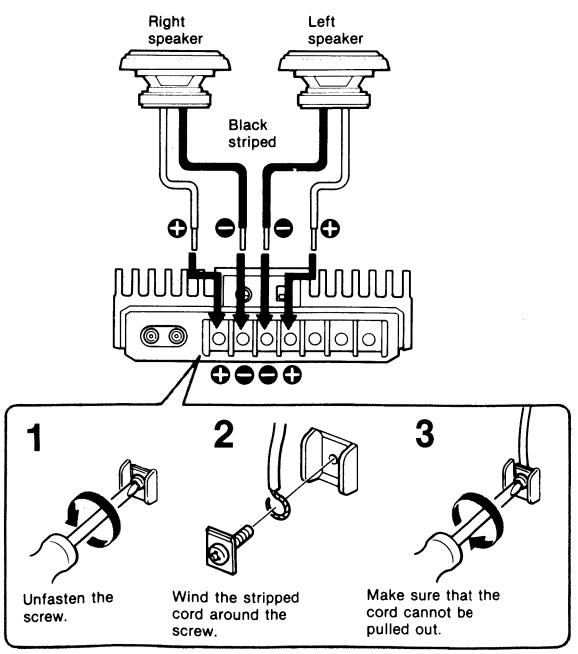
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the power input lead only after all other leads have been connected.
- **Be sure to connect the ground wire of the unit securely to a metal point of the car. A loose connection may cause a malfunction of the amplifier.**
- To avoid impairing sound by noises, keep the power input lead away from the phono input or output cord of the car stereo, or from the car stereo itself.

Note
The ground wire and the power input lead are not supplied with your models. When connecting to the battery, connect the fusible link (30 A) between the power input lead and the ⊕ terminal of the battery, or use the power input lead equipped with the fusible link (30 A).

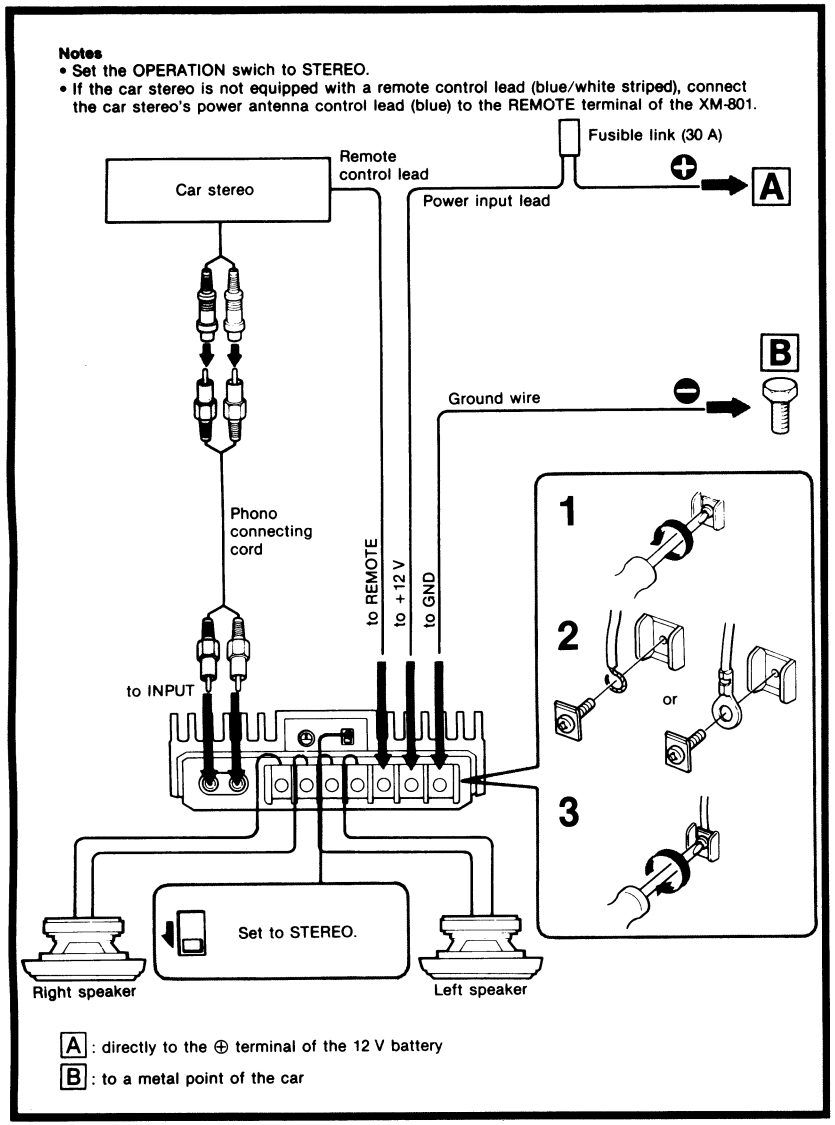
SPEAKER CONNECTION

Caution

- Be sure to use speakers with adequate power handling capacities. The maximum power output of this amplifier is 160 watts per channel. If this precaution is not observed, the speakers will be damaged.
- Do not connect the ⊖ terminal of the speaker system with the car chassis, and do not connect the ⊖ terminal of the right speaker with that of the left speaker.



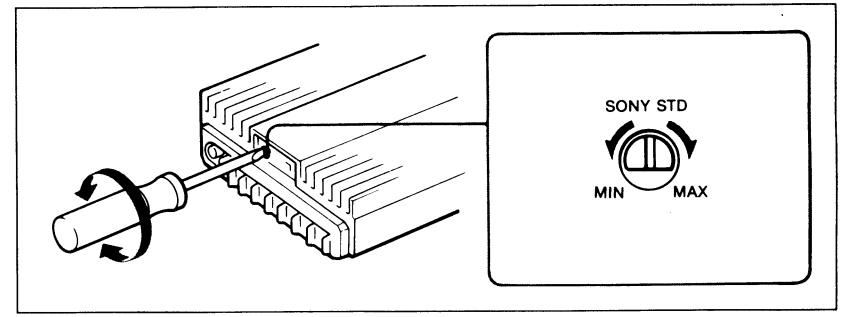
Connection of a 2-speaker System


Notes
• Set the OPERATION swich to STEREO.
• If the car stereo is not equipped with a remote control lead (blue/white striped), connect the car stereo's power antenna control lead (blue) to the REMOTE terminal of the XM-801.
Fusible link (30 A)
Remote control lead
Car stereo
Power input lead
A
B
Ground wire
Phono connecting cord
to REMOTE
to +12 V
to GND
to INPUT
1
2
or
3
Set to STEREO.
Right speaker
Left speaker
A : directly to the ⊕ terminal of the 12 V battery
B : to a metal point of the car

Input Level Adjustment

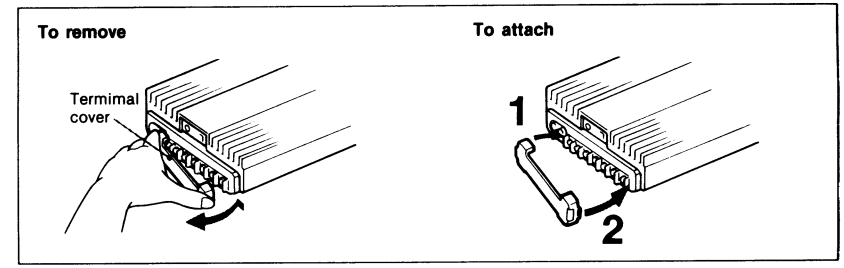
When using source equipment of manufacturers other than Sony, adjust the input level as necessary by turning the input level control with a screw driver.

Be sure to set the control to the SONY STD (standard) position when using a Sony product.



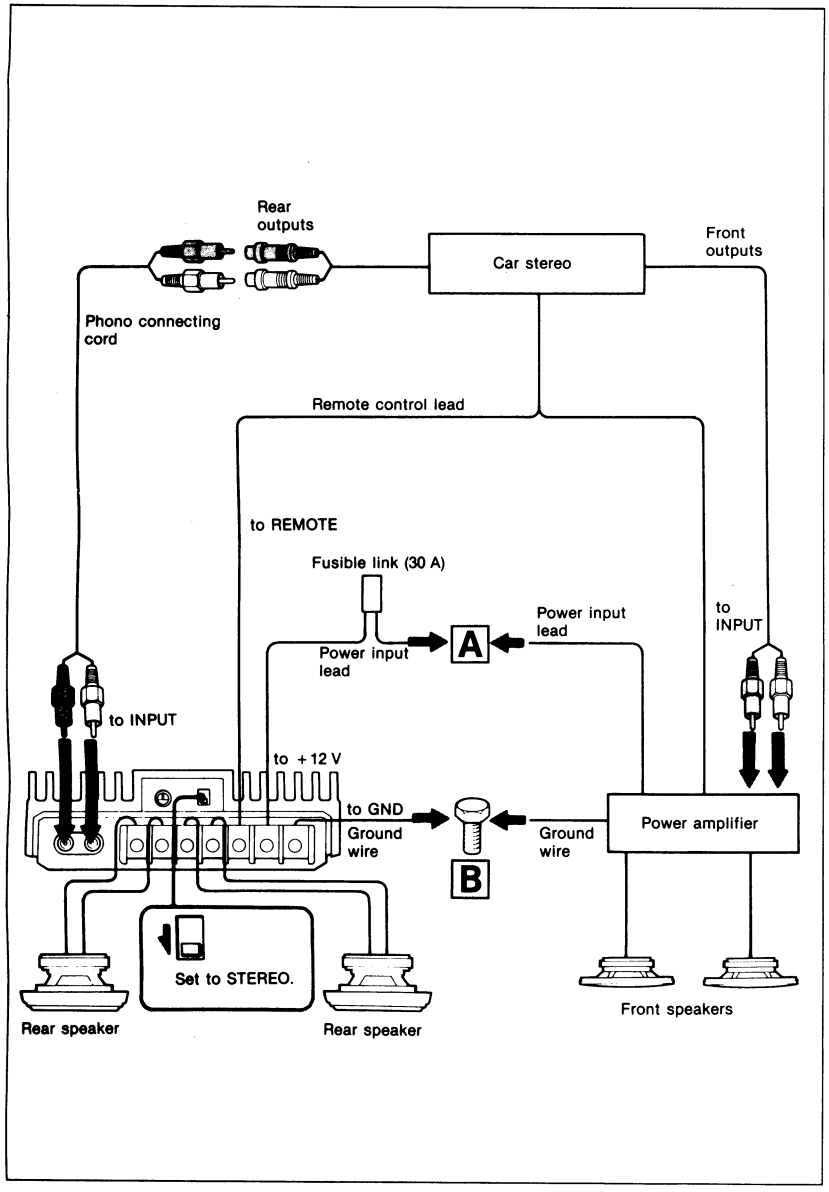
Note on the supplied terminal cover

Before connections, remove the terminal cover.



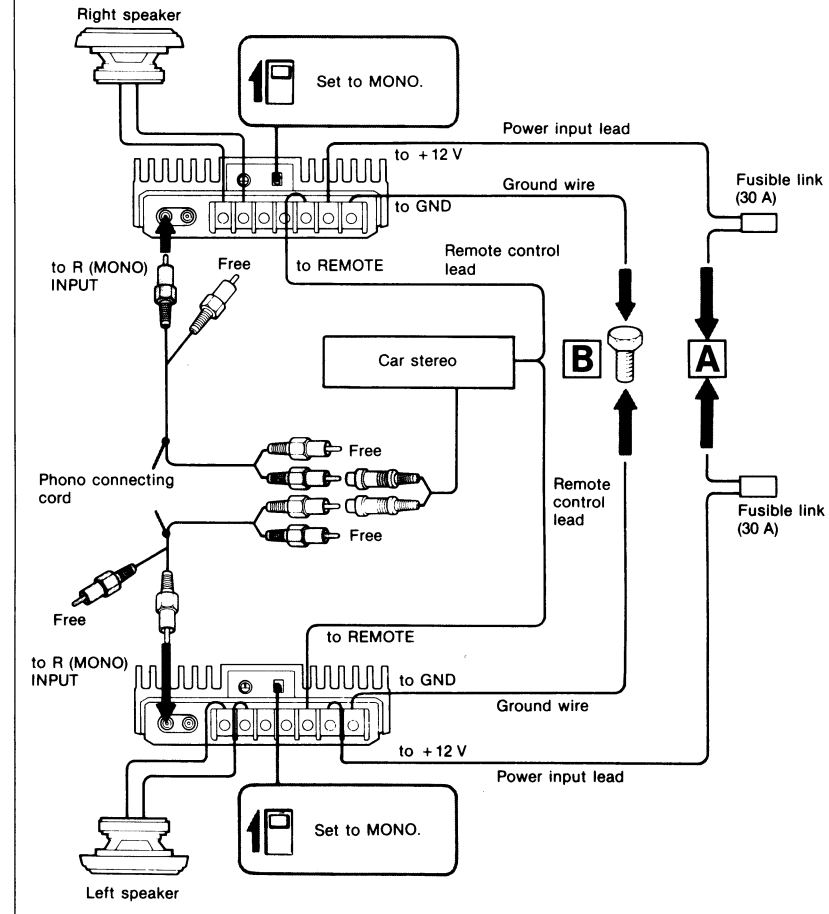
To avoid short circuits, be sure to attach the terminal cover after connections.

Connection of a 4-speaker System



Using the XM-801 as a Monaural Amplifier

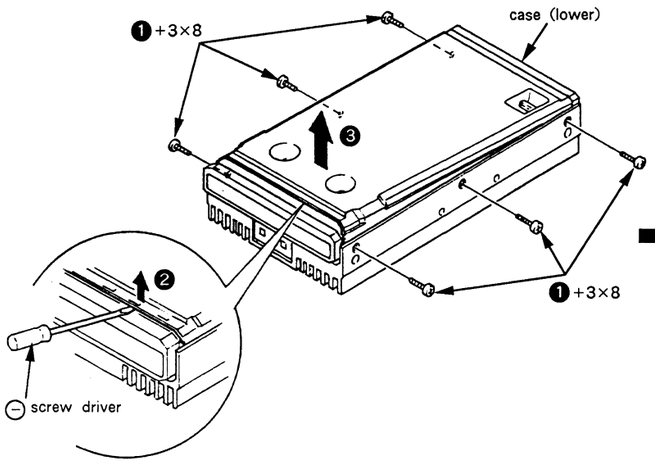
- Set the OPERATION switch to MONO.
- Use only the R (MONO) speaker terminals and R (MONO) INPUT jack (red) of the XM-801.



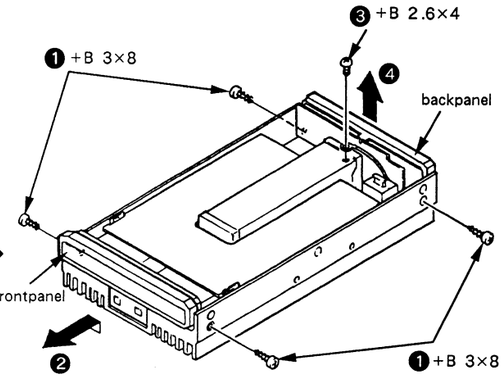
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

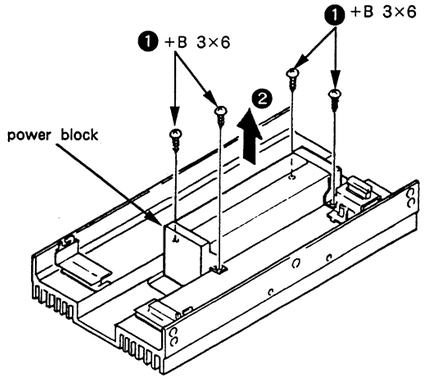
[CASE (LOWER)]



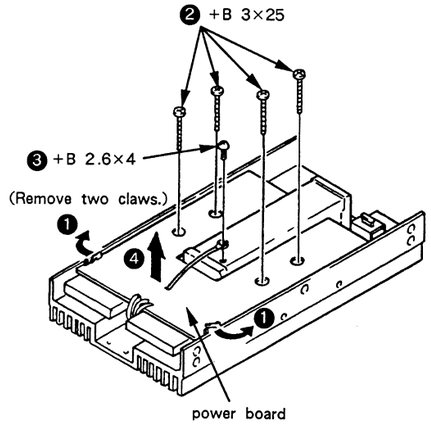
[FRONTPANEL, BACKPANEL]



[POWER BLOCK]



[POWER BOARD]



SECTION 3
ELECTRICAL ADJUSTMENTS

● **Idling Adjustment**

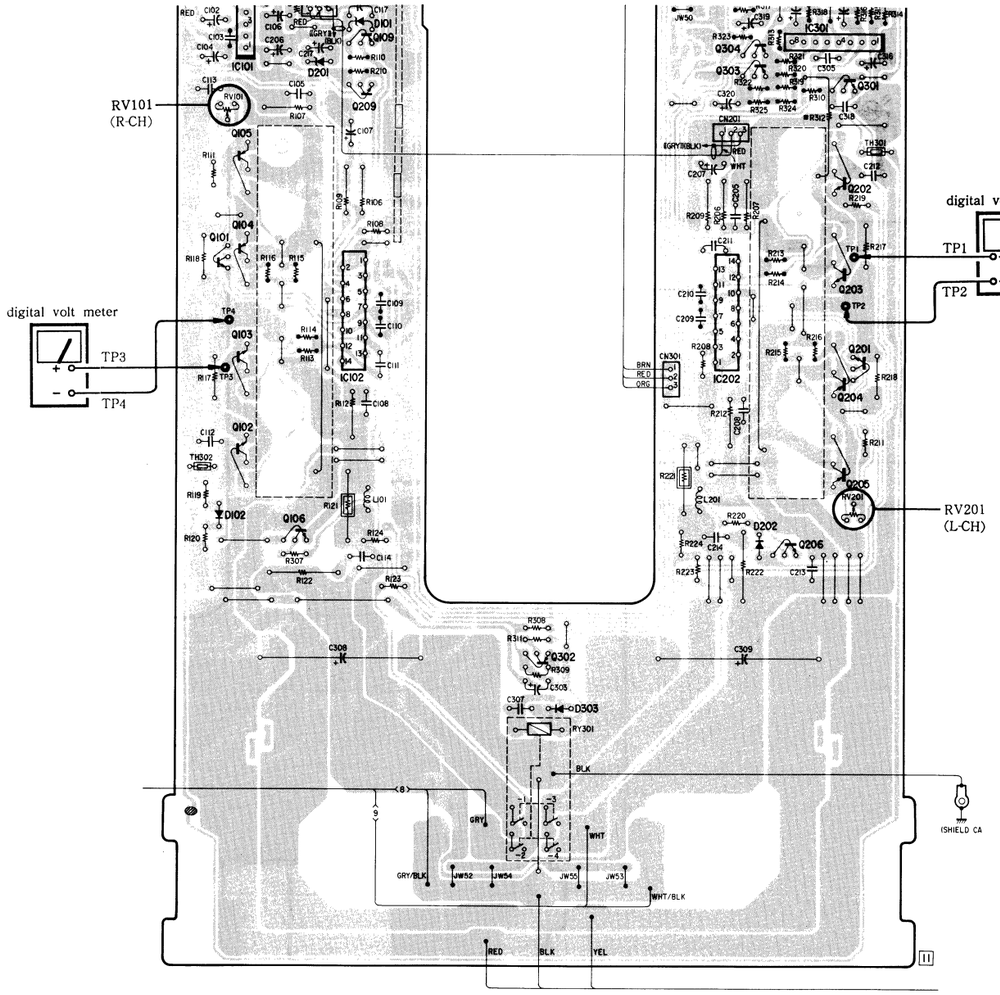
Note : After turning the power switch on, wait several minutes, so that the set normally operates.

Procedure :

1. Connect a VOM between test points TP1, 2 for L-CH and test points TP3, 4 for R-CH.
2. Adjust RV101 (R-CH) and RV201 (L-CH) for 2mV±0.5mV reading on digital volt meter.

Adjustmemt Location :

– AMPLIFIER BOARD –



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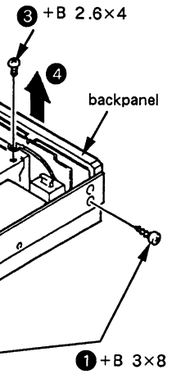
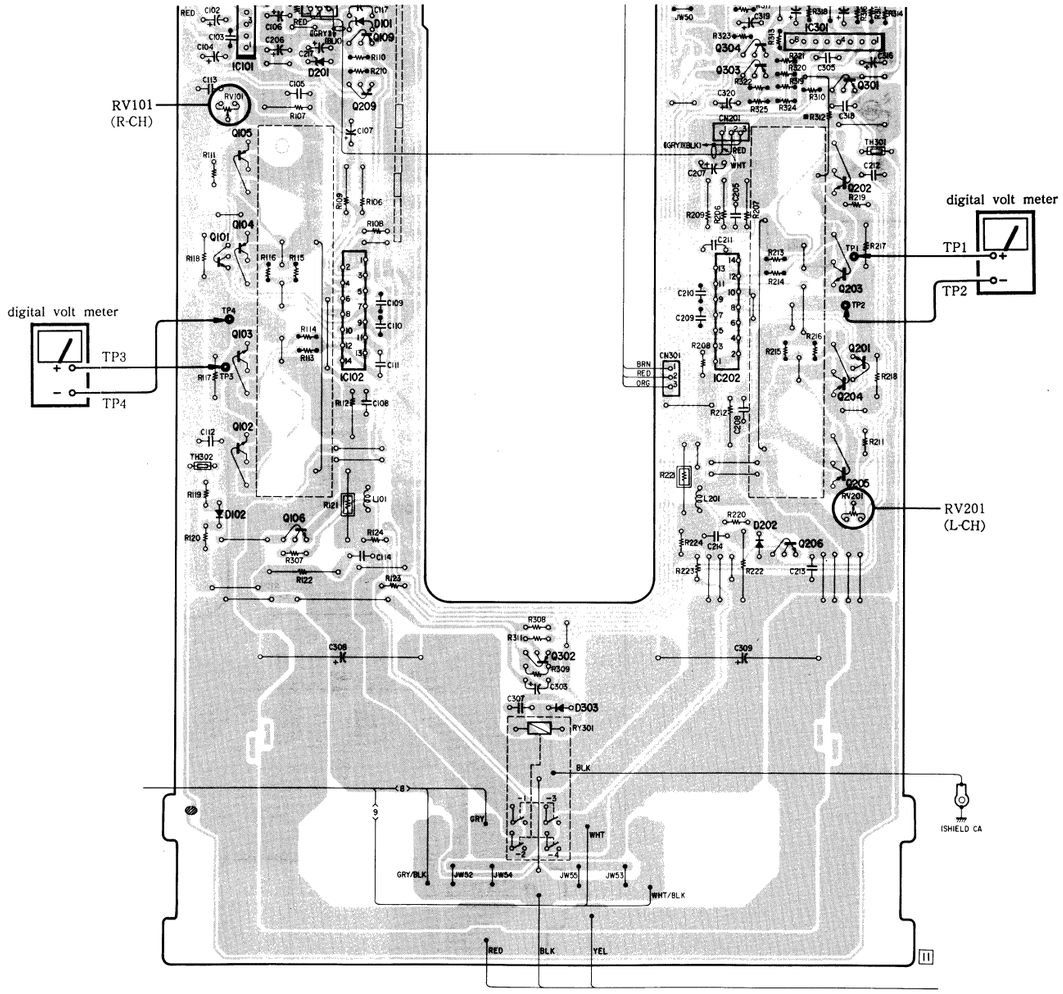




SECTION 4
DIAGRAMS

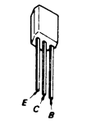
4-1. SEMICONDUCTOR LEAD LAYOUTS

μPC1237HA

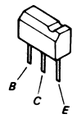
μPC1298V

μPC4570HA-1

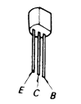
DTA124ES
2SC2459
2SC3400



2SA881
2SB822
2SC2673

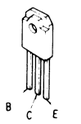


2SA988F

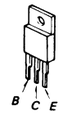


2SA1175
2SC2785
2SC3623-L

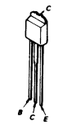
2SA1186
2SD1213



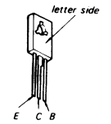
2SA1328
2SC3345



2SC3474

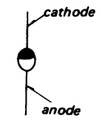


2SC2688
2SC2837

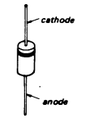


2SD774

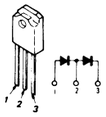
DSA3A4



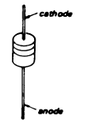
ERD28-08S
1SS83



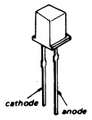
ESAD33-02D



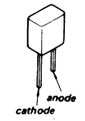
RD6.2ES-B3
RD7.5ES-B1
RD8.2ES-B3
RD15ES-B
RD16ES-B3
RD18ES-B1
1SS119



SLP153B-40

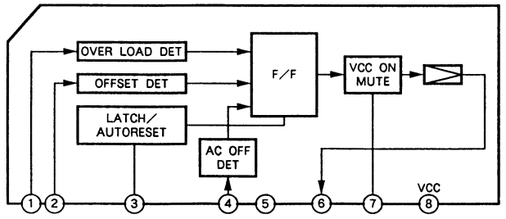


SLP253B-40

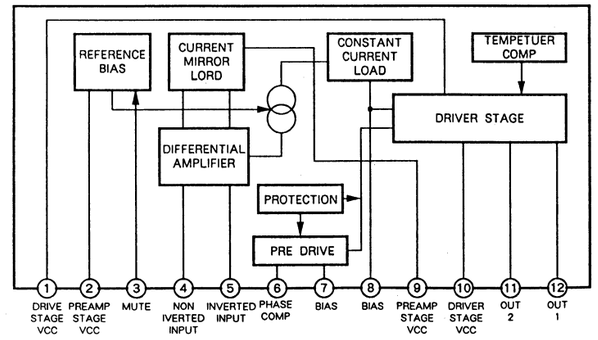


4-2. IC BLOCK DIAGRAM

IC301 μPC1237HA



IC102, 202 μPC1298V



4-3. PRINTED WIRING BOARDS

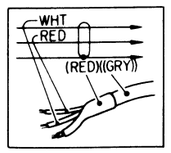
● See page 7 for semiconductor lead layouts.

● SEMICONDUCTOR LOCATION

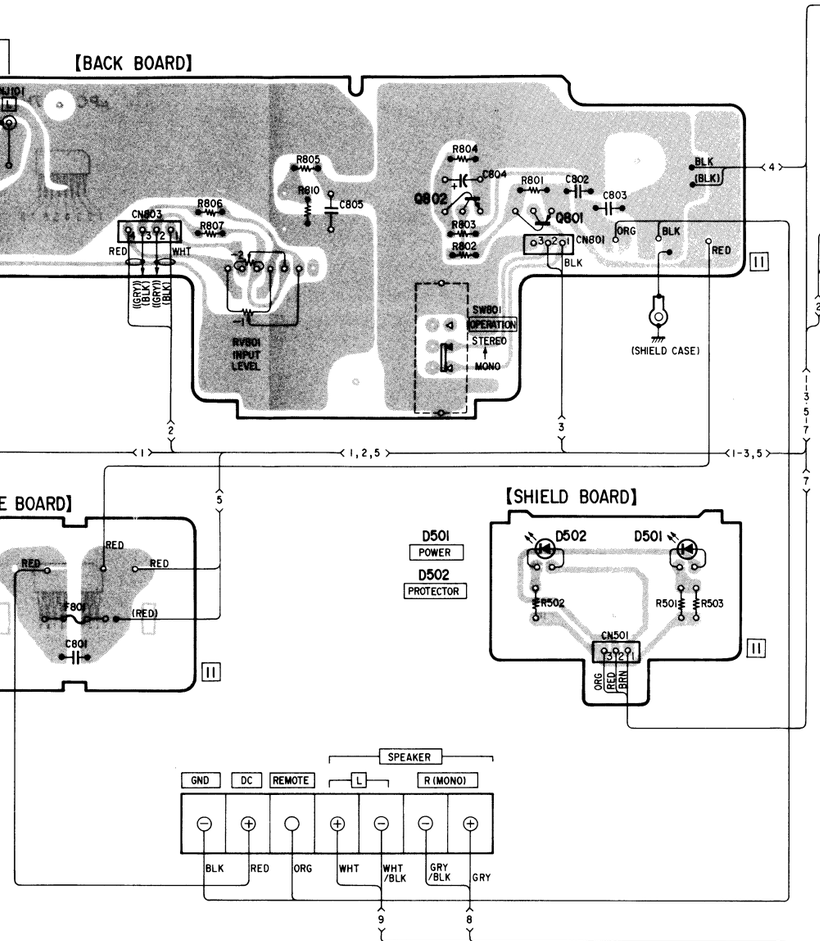
Ref. No.	Location	Ref. No.	Location
IC101	C-9	Q909	F-16
IC102	F-10	Q910	E-16
IC202	F-13	Q911	D-16
IC301	C-14	Q912	C-16
		Q913	I-18
Q101	E-9	Q914	H-19
Q102	F-9	Q915	H-20
Q103	F-9	Q916	H-20
Q104	E-9	Q917	H-19
Q105	D-9	Q918	J-18
Q106	G-9		
Q108	A-8	D101	C-10
Q109	C-10	D102	G-9
Q201	F-14	D201	C-9
Q202	D-14	D202	G-13
		D301	C-14
Q203	E-14		
Q204	F-14	D302	B-13
Q205	G-14	D303	I-12
Q206	G-14	D305	C-13
Q207	B-9	D306	B-13
		D501	D-7
Q209	D-10		
Q301	C-14	D502	D-6
Q302	H-11	D901	D-19
Q303	C-13	D902	D-20
Q304	C-13	D903	D-20
		D904	D-19
Q801	B-6		
Q802	B-5	D905	D-19
Q901	C-20	D906	D-19
Q902	C-20	D907	C-17
Q903	D-19	D908	E-16
		D909	C-17
Q904	C-20		
Q905	C-20	D910	G-16
Q906	D-20	D911	J-16
Q907	D-19	D912	H-16
Q908	D-19	D913	I-16

Note:

- Color code or sleeving over the end of the jacket.



- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ▒▒ : Pattern on the side which is seen.



7 for semiconductor lead layouts.

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

【AMPLIFIER BOARD】

【SHIELD BOARD】

【POWER BOARD】

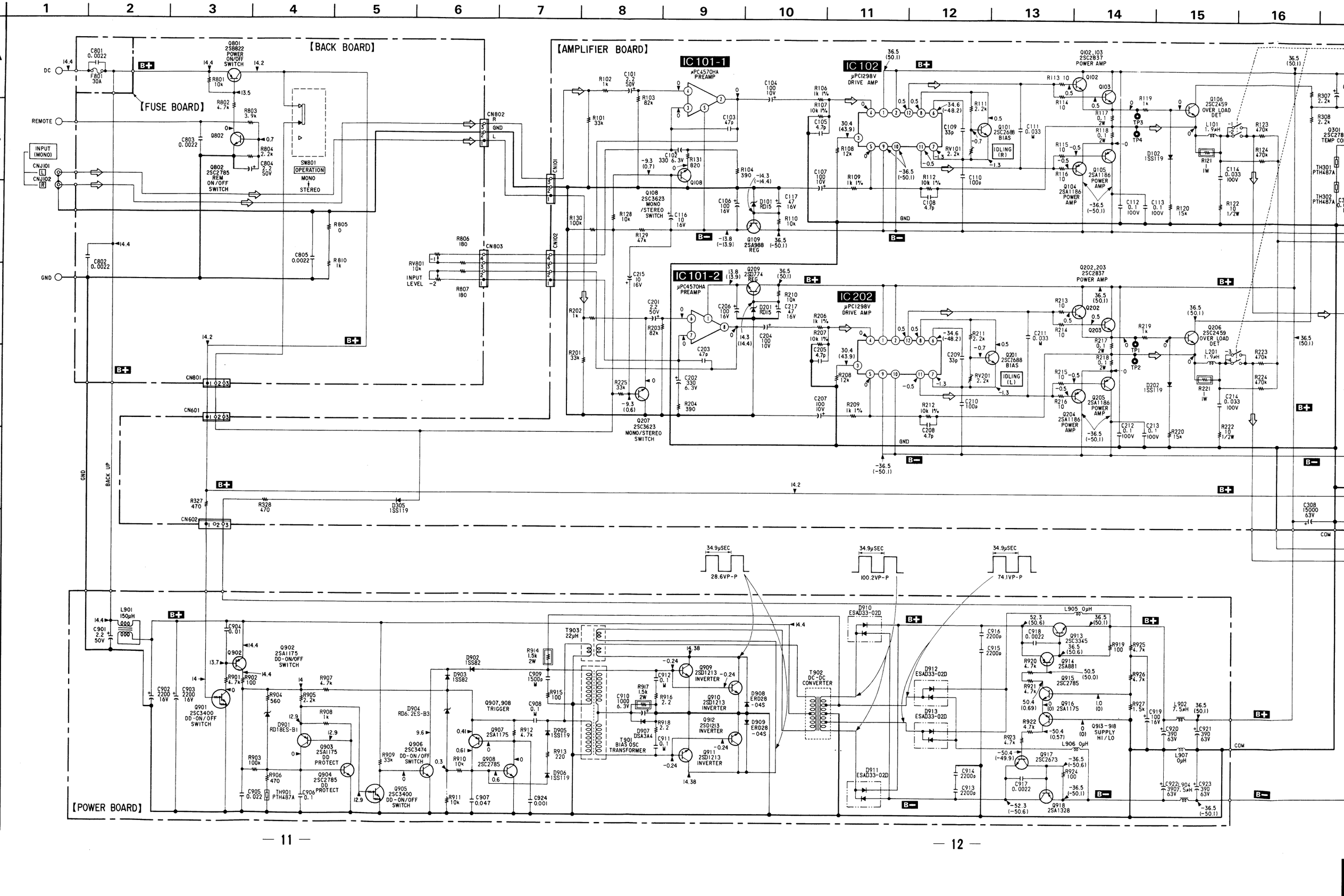
【POWER SUB (B) BOARD】

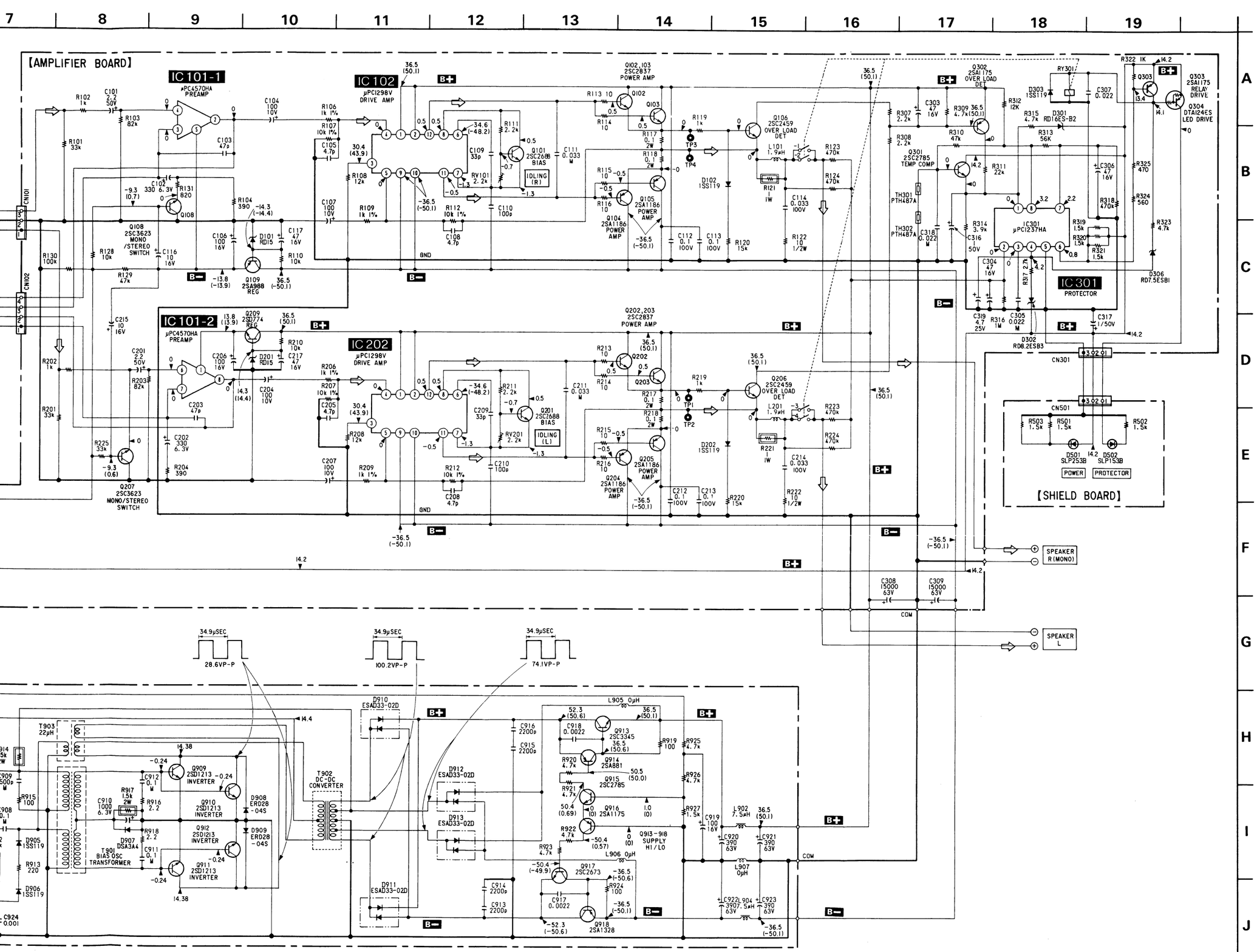
【POWER SUB (A) BOARD】

D501 POWER
D502 PROTECTOR

SPEAKER
GND DC REMOTE L R (MONO)
BLK RED ORG WHT WHT/BLK GRY/BLK GRY

(SHIELD CASE)


【BACK BOARD】
【FUSE BOARD】
【AMPLIFIER BOARD】
【POWER BOARD】
IC101-1
IC101-2
IC102
IC202
DC
REMOTE
INPUT (MONO)
GND
BACK UP
COM
CN802
CN803
CN101
CN102
CN801
CN601
CN602
SW801 OPERATION MONO STEREO
INPUT LEVEL
Q801 2SB822 POWER ON/OFF SWITCH
Q802 2SC2785 REM ON/OFF SWITCH
Q901 2SC3400 DD-ON/OFF SWITCH
Q902 2SA1175 DD-ON/OFF SWITCH
Q903 2SA1175 DD PROTECT
Q904 2SC2785 DD PROTECT
Q905 2SC3400 DD-ON/OFF SWITCH
Q906 2SC3474 DD-ON/OFF SWITCH
Q907,908 TRIGGER
Q909 2SD1213 INVERTER
Q910 2SD1213 INVERTER
Q911 2SD1213 INVERTER
Q912 2SD1213 INVERTER
Q101 2SC2688 BIAS
Q201 2SC2688 BIAS
Q102,103 2SC2837 POWER AMP
Q202,203 2SC2837 POWER AMP
Q104 2SA1186 POWER AMP
Q105 2SA1186 POWER AMP
Q204 2SA1186 POWER AMP
Q205 2SA1186 POWER AMP
Q106 2SC2459 OVER LOAD DET
Q206 2SC2459 OVER LOAD DET
Q107 2SA1328
Q108 2SC3623 MONO/STEREO SWITCH
Q207 2SC3623 MONO/STEREO SWITCH
Q109 2SA988 REG
Q209 2SD774 REG
μPC4570HA PREAMP
μPC1298V DRIVE AMP
IDLING (R)
IDLING (L)
T901 BIAS OSC TRANSFORMER
T902 DC-DC CONVERTER
T903 22μH
D101 RD15
D201 RD15
D901 RD18ES-B1
D902 1SS82
D903 1SS82
D904 RD6.2ES-B3
D905 1SS119
D906 1SS119
D907 DSA3A4
D908 ERD28-04S
D909 ERD28-04S
D910 ESAD33-02D
D911 ESAD33-02D
D912 ESAD33-02D
D913 ESAD33-02D
D102 1SS119
D202 1SS119
D305 1SS119
TH301 PTH487A
TH302 PTH487A
TH901 PTH487A
TP1
TP2
TP3
TP4
SUPPLY HI/LO
34.9μSEC
28.6VP-P
100.2VP-P
74.1VP-P



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- ▭ : nonflammable resistor.
- **Switch**

Ref. No.	Switch	Position
SW802	OPERATION	MONO

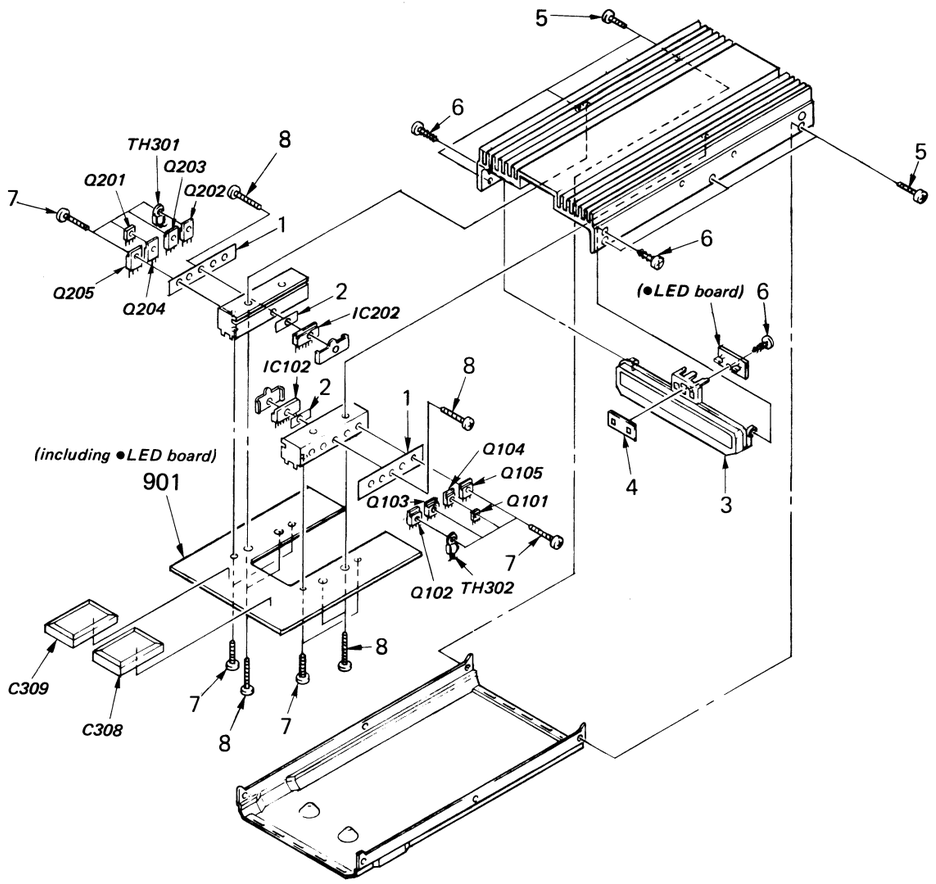
- B+ : B+ Line
- B− : B− Line
- ▭ : adjustment for repair.
- Power voltage is dc 14.4V and fed with regulated dc power supply from DC, REMOTE terminals.
- Voltage and waveforms are dc with respect to ground under no signal conditions.
  no-mark : MONO
  ( ) : STEREO
- Voltages are taken with a VOM (50 kΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- ⇨ : Signal path.

SECTION 5
EXPLODED VIEWS

NOTE:

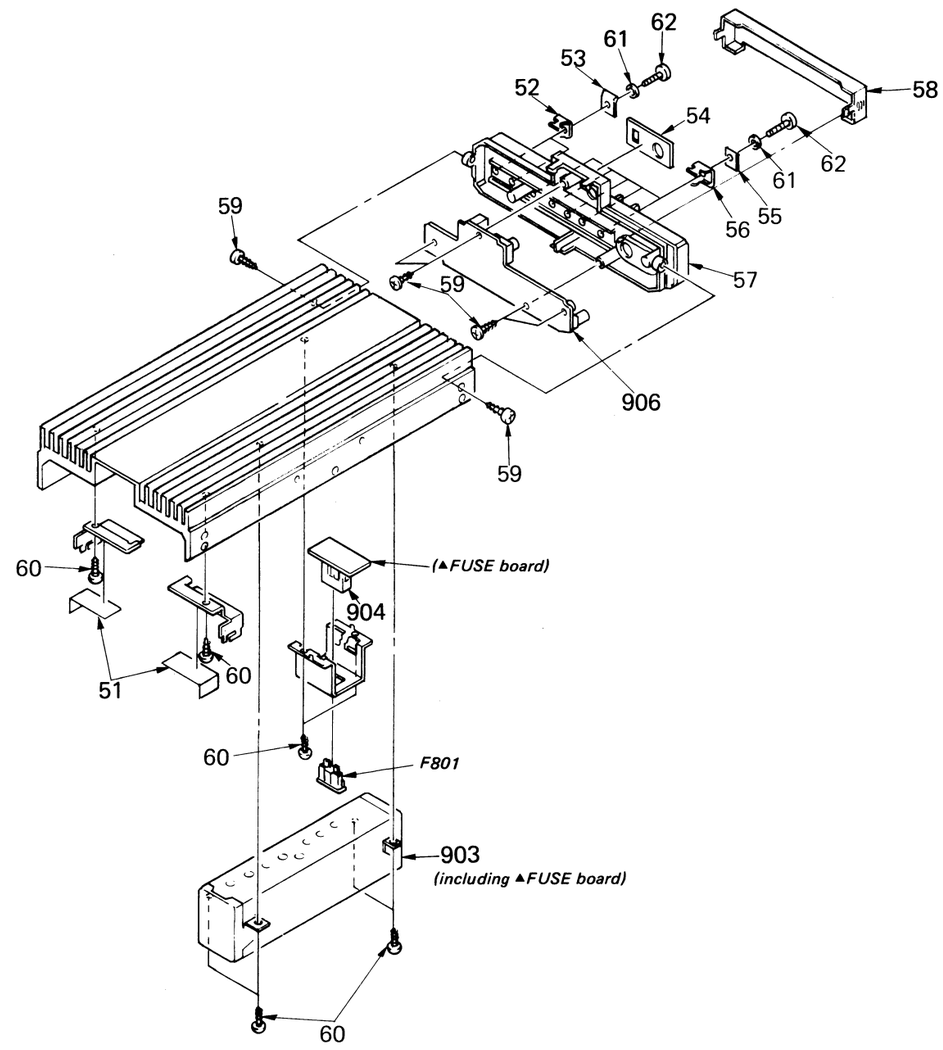
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts' Color

5-1.



No.	Part No.	Description	Remarks
1	*3-323-739-01	SHEET (TR), INSULATING	
2	*3-323-738-01	SHEET (IC), INSULATING	
3	3-322-430-31	(Canadian,E)...PANEL, FRONT	
	3-322-430-41	(US).....PANEL, FRONT	
4	3-322-409-11	PLATE, ORNAMENTAL	
5	3-721-187-01	SCREW (3X8)	
6	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
7	7-682-549-09	SCREW +B 3X10	
8	7-682-554-09	SCREW +B 3X25	
901	*A-3260-811-A	MOUNTED PCB, POWER	
C308	1-125-505-11	CAP, ELECT 15000MF 20% 63V	
C309	1-125-505-11	CAP, ELECT 15000MF 20% 63V	

5-2.



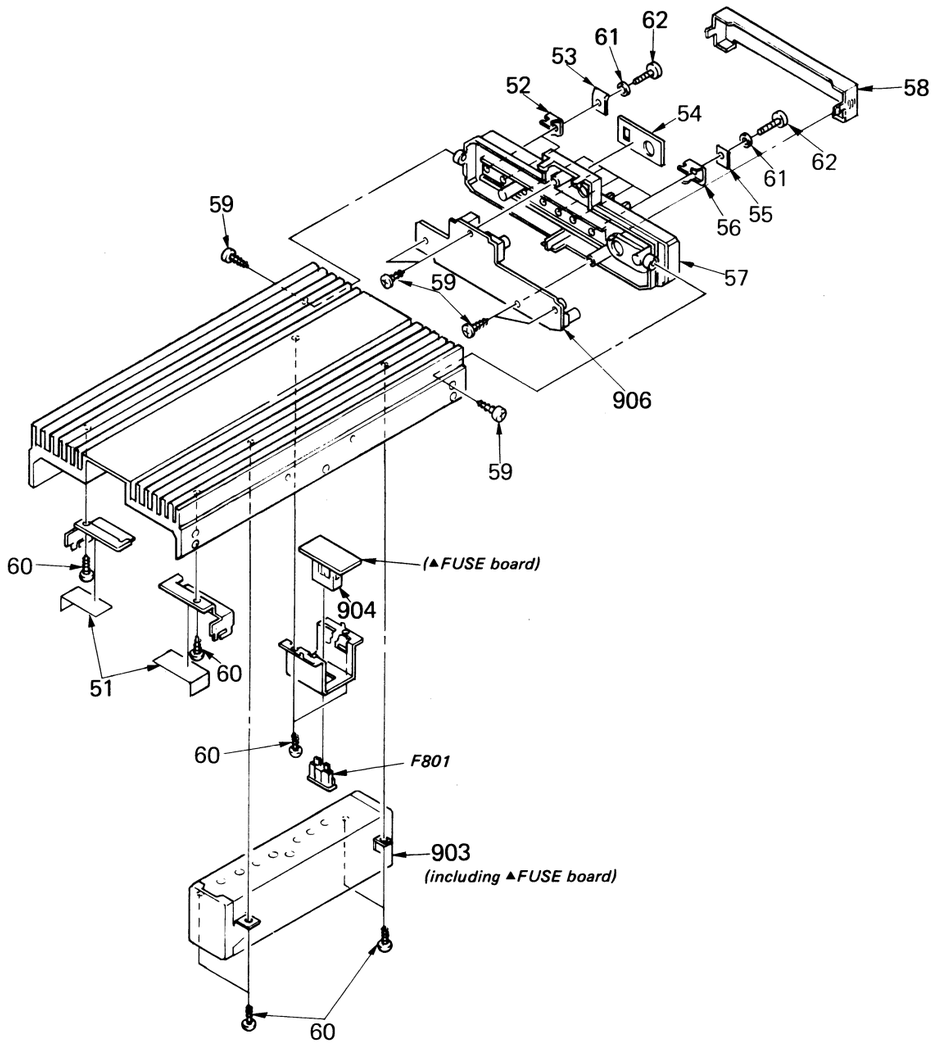
No.	Part No.	Description	Remarks
51	*3-323-736-01	SHEET (PCB), INSULATING	
52	*3-322-492-01	TERMINAL (2)	
53	*3-322-494-01	RETAINER (2), WIRE	
54	*3-323-750-01	PLATE, ORNAMENTAL	
55	*3-322-493-01	RETAINER (1), WIRE	
56	*3-322-491-01	TERMINAL (1)	
57	*3-323-759-01	PANEL, BACK	
58	*3-323-753-01	COVER	
59	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
60	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
61	7-623-210-22	SW 4, TYPE 2	
62	7-682-564-04	SCREW +B 4X14	
903	*A-3217-352-A	POWER BLOCK ASSY	
904	1-533-179-11	HOLDER, FUSE	
906	*1-628-297-11	PC BOARD, BACK (U)	
F801	1-532-947-11	FUSE (BRADE TYPE) (AUTO FUSE)(30A)	

NOTE:

- Due to s
  list may
  the diagr
- Items m
  are seldo
  delay sh
  items.
- If there
  such as
  circuit pa
  resistors

Ref.No.	Pa
901	*A-
903	*A-
904	1-
906	*1-
BBP901	*1-
BBP902	*1-
BBP903	1-
C101	1-
C102	1-
C103	1-
C104	1-
C105	1-
C106	1-
C107	1-
C108	1-
C109	1-
C110	1-
C111	1-
C112	1-
C113	1-
C114	1-
C116	1-
C117	1-
C201	1-
C202	1-
C203	1-
C204	1-
C205	1-
C206	1-
C207	1-
C208	1-
C209	1-
C210	1-
C211	1-
C212	1-
C213	1-
C214	1-
C215	1-
C217	1-
C303	1-
C304	1-
C305	1-
C306	1-
C307	1-
C308	1-
C309	1-

5-2.



Remarks	No.	Part No.	Description
	51	*3-323-736-01	SHEET (PCB), INSULATING
	52	*3-322-492-01	TERMINAL (2)
	53	*3-322-494-01	RETAINER (2), WIRE
	54	*3-323-750-01	PLATE, ORNAMENTAL
V			
V	55	*3-322-493-01	RETAINER (1), WIRE
	56	*3-322-491-01	TERMINAL (1)
	57	*3-323-759-01	PANEL, BACK
	58	*3-323-753-01	COVER

Remarks	No.	Part No.	Description	Remarks
	59	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
	60	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
	61	7-623-210-22	SW 4, TYPE 2	
	62	7-682-564-04	SCREW +B 4X14	
	903	*A-3217-352-A	POWER BLOCK ASSY	
	904	1-533-179-11	HOLDER, FUSE	
	906	*1-628-297-11	PC BOARD, BACK (U)	
	F801	1-532-947-11	FUSE (BRADE TYPE) (AUTO FUSE)(30A)	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

Ref.No.	Part No.	Description			
901	*A-3260-811-A	MOUNTED PCB, POWER			
903	*A-3217-352-A	POWER BLOCK ASSY			
904	1-533-179-11	HOLDER, FUSE			
906	*1-628-297-11	PC BOARD, BACK (U)			
BBP901	*1-506-529-11	PIN CONNECTOR, B-B 4P			
BBP902	*1-506-529-11	PIN CONNECTOR, B-B 4P			
BBP903	1-566-284-11	PIN CONNECTOR, B-B 6P			
C101	1-126-045-11	ELECT	2.2MF	20%	50V
C102	1-124-983-91	ELECT	330MF	20%	6.3V
C103	1-163-173-00	CERAMIC MELF	47PF	5%	50V
C104	1-124-994-91	ELECT	100MF	20%	10V
C105	1-162-195-31	CERAMIC	4.7PF	10%	50V
C106	1-126-101-11	ELECT	100MF	20%	16V
C107	1-124-994-91	ELECT	100MF	20%	10V
C108	1-162-195-31	CERAMIC	4.7PF	10%	50V
C109	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C110	1-163-181-00	CERAMIC MELF	100PF	10%	50V
C111	1-136-171-00	FILM	0.033MF	5%	50V
C112	1-106-220-00	MYLAR	0.1MF	5%	100V
C113	1-106-220-00	MYLAR	0.1MF	5%	100V
C114	1-106-379-12	MYLAR	0.033MF	5%	100V
C116	1-126-157-11	ELECT	10MF	20%	16V
C117	1-124-589-11	ELECT	47MF	20%	16V
C201	1-126-045-11	ELECT	2.2MF	20%	50V
C202	1-124-983-91	ELECT	330MF	20%	6.3V
C203	1-163-173-00	CERAMIC MELF	47PF	5%	50V
C204	1-124-994-91	ELECT	100MF	20%	10V
C205	1-162-195-31	CERAMIC	4.7PF	10%	50V
C206	1-126-101-11	ELECT	100MF	20%	16V
C207	1-124-994-91	ELECT	100MF	20%	10V
C208	1-162-195-31	CERAMIC	4.7PF	10%	50V
C209	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C210	1-163-181-00	CERAMIC MELF	100PF	10%	50V
C211	1-136-171-00	FILM	0.033MF	5%	50V
C212	1-106-220-00	MYLAR	0.1MF	5%	100V
C213	1-106-220-00	MYLAR	0.1MF	5%	100V
C214	1-106-379-12	MYLAR	0.033MF	5%	100V
C215	1-126-157-11	ELECT	10MF	20%	16V
C217	1-124-589-11	ELECT	47MF	20%	16V
C303	1-124-589-11	ELECT	47MF	20%	16V
C304	1-124-589-11	ELECT	47MF	20%	16V
C305	1-163-157-00	FILM	0.022MF	5%	50V
C306	1-124-589-11	ELECT	47MF	20%	16V
C307	1-163-157-00	FILM	0.022MF	5%	50V
C308	1-125-505-11	CAP, ELECT	15000MF	20%	63V
C309	1-125-505-11	CAP, ELECT	15000MF	20%	63V

Ref.No.	Part No.	Description			
C316	1-124-499-11	ELECT	1MF	20%	50V
C317	1-124-499-11	ELECT	1MF	20%	50V
C318	1-163-157-00	FILM	0.022MF	5%	50V
C319	1-126-094-11	ELECT	4.7MF	20%	25V
C801	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C802	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C803	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C804	1-124-257-00	ELECT	2.2MF	20%	50V
C805	1-130-475-00	MYLAR	0.0022MF	5%	50V
C901	1-124-925-11	ELECT	2.2MF	20%	50V
C902	1-126-408-11	ELECT	2200MF	20%	16V
C903	1-126-408-11	ELECT	2200MF	20%	16V
C904	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C905	1-163-063-00	CERAMIC MELF	0.022MF		25V
C906	1-136-165-00	FILM	0.1MF	5%	50V
C907	1-136-161-00	FILM	0.047MF	5%	50V
C908	1-136-165-00	FILM	0.1MF	5%	50V
C909	1-130-473-00	FILM	0.0015MF	5%	50V
C910	1-126-168-11	ELECT	1000MF	25%	6.3V
C911	1-136-165-00	FILM	0.1MF	5%	50V
C912	1-136-165-00	FILM	0.1MF	5%	50V
C913	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C914	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C915	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C916	1-163-213-00	CERAMIC MELF	0.0022MF	30%	16V
C917	1-130-475-00	FILM	0.0022MF	5%	50V
C918	1-130-475-00	FILM	0.0022MF	5%	50V
C919	1-126-101-11	ELECT	100MF	20%	16V
C920	1-126-409-11	ELECT	390MF	20%	63V
C921	1-126-409-11	ELECT	390MF	20%	63V
C922	1-126-409-11	ELECT	390MF	20%	63V
C923	1-126-409-11	ELECT	390MF	20%	63V
C924	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
CN501	*1-506-999-11	PIN, CONNECTOR (PC BOARD) 3P			
CNJ101	1-562-828-21	JACK, PIN (WHITE)(INPUT (MONO) L)			
CNJ102	1-562-828-11	JACK, PIN (RED)(INPUT (MONO) R)			
CNP101	*1-564-002-00	PIN, CONNECTOR 3P			
CNP102	*1-564-003-00	PIN, CONNECTOR 4P			
CNP601	*1-564-002-00	PIN, CONNECTOR 3P			
CNP602	*1-506-999-11	PIN, CONNECTOR (PC BOARD) 3P			
D101	8-719-110-38	DIODE RD15ES-B			
D102	8-719-911-19	DIODE 1SS119			
D201	8-719-110-38	DIODE RD15ES-B			
D202	8-719-911-19	DIODE 1SS119			
D301	8-719-110-46	DIODE RD16ES-B3			
D302	8-719-110-09	DIODE RD8.2ES-B3			

Ref.No.	Part No.	Description
D303	8-719-911-19	DIODE 1SS119
D305	8-719-911-19	DIODE 1SS119
D306	8-719-110-02	DIODE RD7.5ES-B1
D501	8-719-918-98	DIODE SLP253B-40
D502	8-719-918-97	DIODE SLP153B-40
D901	8-719-110-48	DIODE RD18ES-B1
D902	8-719-901-83	DIODE 1SS83
D903	8-719-901-83	DIODE 1SS83
D904	8-719-109-94	DIODE RD6.2ES-B3
D905	8-719-911-19	DIODE 1SS119
D906	8-719-911-19	DIODE 1SS119
D907	8-719-945-59	DIODE DSA3A4
D908	8-719-928-08	DIODE ERD28-08S
D909	8-719-928-08	DIODE ERD28-08S
D910	8-719-903-03	DIODE ESAD33-02D
D911	8-719-903-03	DIODE ESAD33-02D
D912	8-719-903-03	DIODE ESAD33-02D
D913	8-719-903-03	DIODE ESAD33-02D
F801	1-532-947-11	FUSE (BRADE TYPE) (AUTO FUSE)(30A)
IC101	8-759-112-93	IC UPC4570HA-1
IC102	8-759-109-06	IC UPC1298V
IC202	8-759-109-06	IC UPC1298V
IC301	8-759-111-68	IC UPC1237HA
JW1	1-249-366-11	CARBON MELF 0 5% 1/5W
JW43	1-249-366-11	CARBON MELF 0 5% 1/5W
JW50	1-249-366-11	CARBON MELF 0 5% 1/5W
JW52	1-249-366-11	CARBON MELF 0 5% 1/5W
JW53	1-249-366-11	CARBON MELF 0 5% 1/5W
JW54	1-249-366-11	CARBON MELF 0 5% 1/5W
JW55	1-249-366-11	CARBON MELF 0 5% 1/5W
L101	*1-420-872-00	COIL, AIR CORE 190UH
L201	*1-420-872-00	COIL, AIR CORE 190UH
L901	1-424-113-11	COIL, CHOKE 150UH
L902	1-424-112-11	COIL, CHOKE 7.5UH
L904	1-424-112-11	COIL, CHOKE 7.5UH
L905	*1-410-858-11	INDUCTOR 0UH
L906	*1-410-858-11	INDUCTOR 0UH
L907	*1-410-858-11	INDUCTOR 0UH
Q101	8-729-168-82	TRANSISTOR 2SC2688
Q102	8-729-383-73	TRANSISTOR 2SC2837
Q103	8-729-383-73	TRANSISTOR 2SC2837
Q104	8-729-318-63	TRANSISTOR 2SA1186
Q105	8-729-318-63	TRANSISTOR 2SA1186
Q106	8-729-245-91	TRANSISTOR 2SC2459
Q108	8-729-107-77	TRANSISTOR 2SC3623-L
Q109	8-729-108-14	TRANSISTOR 2SA988-F
Q201	8-729-168-82	TRANSISTOR 2SC2688
Q202	8-729-383-73	TRANSISTOR 2SC2837
Q203	8-729-383-73	TRANSISTOR 2SC2837
Q204	8-729-318-63	TRANSISTOR 2SA1186
Q205	8-729-318-63	TRANSISTOR 2SA1186
Q206	8-729-245-91	TRANSISTOR 2SC2459
Q207	8-729-107-77	TRANSISTOR 2SC3623-L
Q209	8-729-177-43	TRANSISTOR 2SD774
Q301	8-729-178-54	TRANSISTOR 2SC2785
Q302	8-729-117-54	TRANSISTOR 2SA1175

Ref.No.	Part No.	Description
Q303	8-729-117-54	TRANSISTOR 2SA1175
Q304	8-729-900-63	TRANSISTOR DTA124ES
Q801	8-729-982-22	TRANSISTOR 2SB822
Q802	8-729-178-54	TRANSISTOR 2SC2785
Q901	8-729-806-34	TRANSISTOR 2SC3400
Q902	8-729-117-54	TRANSISTOR 2SA1175
Q903	8-729-117-54	TRANSISTOR 2SA1175
Q904	8-729-178-54	TRANSISTOR 2SC2785
Q905	8-729-806-34	TRANSISTOR 2SC3400
Q906	8-729-230-40	TRANSISTOR 2SC3474
Q907	8-729-117-54	TRANSISTOR 2SA1175
Q908	8-729-178-54	TRANSISTOR 2SC2785
Q909	8-729-810-47	TRANSISTOR 2SD1213
Q910	8-729-810-47	TRANSISTOR 2SD1213
Q911	8-729-810-47	TRANSISTOR 2SD1213
Q912	8-729-810-47	TRANSISTOR 2SD1213
Q913	8-729-201-73	TRANSISTOR 2SC3345
Q914	8-729-988-12	TRANSISTOR 2SA881
Q915	8-729-178-54	TRANSISTOR 2SC2785
Q916	8-729-117-54	TRANSISTOR 2SA1175
Q917	8-729-967-32	TRANSISTOR 2SC2673
Q918	8-729-201-86	TRANSISTOR 2SA1328
R101	1-249-435-11	CARBON MELF 33K 5% 1/5W
R102	1-249-417-11	CARBON MELF 1K 5% 1/5W
R103	1-249-440-11	CARBON MELF 82K 5% 1/5W
R104	1-249-412-11	CARBON MELF 390 5% 1/5W
R106	1-214-729-00	METAL 1K 1% 1/4W
R107	1-214-753-00	METAL 10K 1% 1/4W
R108	1-249-430-11	CARBON 12K 5% 1/4W
R109	1-214-729-00	METAL 1K 1% 1/4W
R110	1-249-429-11	CARBON MELF 10K 5% 1/5W
R111	1-249-421-11	CARBON 2.2K 5% 1/4W
R112	1-214-753-00	METAL 10K 1% 1/4W
R113	1-249-393-11	CARBON MELF 10 5% 1/5W
R114	1-249-393-11	CARBON MELF 10 5% 1/5W
R115	1-249-393-11	CARBON MELF 10 5% 1/5W
R116	1-249-393-11	CARBON MELF 10 5% 1/5W
R117	1-217-611-00	RES, METAL PLATE 0.1 10% 2W
R118	1-217-611-00	RES, METAL PLATE 0.1 10% 2W
R119	1-249-417-11	CARBON 1K 5% 1/4W
R120	1-249-431-11	CARBON 15K 5% 1/4W
R121	1-212-360-00	METAL OXIDE 1 5% 1W F
R122	1-247-727-11	CARBON 10 5% 1/2W
R123	1-247-895-00	CARBON 470K 5% 1/4W
R124	1-247-895-00	CARBON 470K 5% 1/4W
R128	1-249-429-11	CARBON MELF 10K 5% 1/5W
R129	1-249-437-11	CARBON MELF 47K 5% 1/5W
R130	1-249-441-11	CARBON MELF 100K 5% 1/5W
R131	1-249-416-11	CARBON MELF 820 5% 1/5W
R201	1-249-435-11	CARBON MELF 33K 5% 1/5W
R202	1-249-417-11	CARBON MELF 1K 5% 1/5W
R203	1-249-440-11	CARBON MELF 82K 5% 1/5W
R204	1-249-412-11	CARBON MELF 390 5% 1/5W
R206	1-214-729-00	METAL 1K 1% 1/4W
R207	1-214-753-00	METAL 10K 1% 1/4W
R208	1-249-430-11	CARBON 12K 5% 1/4W
R209	1-214-729-00	METAL 1K 1% 1/4W
R210	1-249-429-11	CARBON MELF 10K 5% 1/5W

Ref.No.	Part No.	Description				
R211	1-249-421-11	CARBON	2.2K	5%	1/4W	
R212	1-214-753-00	METAL	10K	1%	1/4W	
R213	1-249-393-11	CARBON MELF	10	5%	1/5W	
R214	1-249-393-11	CARBON MELF	10	5%	1/5W	
R215	1-249-393-11	CARBON MELF	10	5%	1/5W	
R216	1-249-393-11	CARBON MELF	10	5%	1/5W	
R217	1-217-611-00	RES, METAL PLATE 0.1	10%	2W		
R218	1-217-611-00	RES, METAL PLATE 0.1	10%	2W		
R219	1-249-417-11	CARBON	1K	5%	1/4W	
R220	1-249-431-11	CARBON	15K	5%	1/4W	
R221	1-212-360-00	METAL OXIDE	1	5%	1W	F
R222	1-247-727-11	CARBON	10	5%	1/2W	
R223	1-247-895-00	CARBON	470K	5%	1/4W	
R224	1-247-895-00	CARBON	470K	5%	1/4W	
R225	1-249-435-11	CARBON MELF	33K	5%	1/5W	
R307	1-249-421-11	CARBON	2.2K	5%	1/4W	
R308	1-249-421-11	CARBON	2.2K	5%	1/4W	
R309	1-249-425-11	CARBON	4.7K	5%	1/4W	
R310	1-249-437-11	CARBON MELF	47K	5%	1/5W	
R311	1-249-433-11	CARBON	22K	5%	1/4W	
R312	1-249-430-11	RES, CARBON (SMALL)	12K	5%	1/4W	
R313	1-249-438-11	CARBON MELF	56K	5%	1/5W	
R314	1-249-424-11	CARBON MELF	3.9K	5%	1/5W	
R315	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R316	1-215-493-00	CARBON MELF	1M	5%	1/5W	
R317	1-249-422-11	CARBON MELF	2.7K	5%	1/5W	
R318	1-215-485-00	CARBON MELF	470K	5%	1/5W	
R319	1-249-419-11	CARBON MELF	1.5K	5%	1/5W	
R320	1-249-419-11	CARBON MELF	1.5K	5%	1/5W	
R321	1-249-419-11	CARBON MELF	1.5K	5%	1/5W	
R322	1-249-417-11	CARBON MELF	1K	5%	1/5W	
R323	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R324	1-249-414-11	CARBON MELF	560	5%	1/5W	
R325	1-249-413-11	CARBON MELF	470	5%	1/5W	
R327	1-249-413-11	CARBON MELF	470	5%	1/5W	
R328	1-249-413-11	CARBON MELF	470	5%	1/5W	
R501	1-249-419-11	CARBON	1.5K	5%	1/4W	
R502	1-249-419-11	CARBON	1.5K	5%	1/4W	
R503	1-249-419-11	CARBON	1.5K	5%	1/4W	
R801	1-249-429-11	CARBON MELF	10K	5%	1/5W	
R802	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R803	1-249-424-11	CARBON MELF	3.9K	5%	1/5W	
R804	1-249-421-11	CARBON MELF	2.2K	5%	1/5W	
R805	1-249-366-11	CARBON MELF	0	5%	1/5W	
R806	1-249-408-11	CARBON MELF	180	5%	1/5W	
R807	1-249-408-11	CARBON MELF	180	5%	1/5W	
R810	1-249-417-11	CARBON MELF	1K	5%	1/5W	
R901	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R902	1-249-405-11	CARBON MELF	100	5%	1/5W	
R903	1-249-441-11	CARBON MELF	100K	5%	1/5W	
R904	1-249-414-11	CARBON MELF	560	5%	1/5W	
R905	1-249-421-11	CARBON MELF	2.2K	5%	1/5W	
R906	1-249-413-11	CARBON MELF	470	5%	1/5W	
R907	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	

Ref.No.	Part No.	Description				
R908	1-249-417-11	CARBON MELF	1K	5%	1/5W	
R909	1-249-435-11	CARBON MELF	33K	5%	1/5W	
R910	1-249-429-11	CARBON MELF	10K	5%	1/5W	
R911	1-249-429-11	CARBON MELF	10K	5%	1/5W	
R912	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R913	1-249-409-11	CARBON MELF	220	5%	1/5W	
R914	1-206-668-00	METAL OXIDE	1.5K	5%	2W	F
R915	1-249-405-11	CARBON MELF	100	5%	1/5W	
R916	1-249-385-11	CARBON	2.2	5%	1/4W	
R917	1-206-443-00	METAL OXIDE	1.5	5%	2W	F
R918	1-249-385-11	CARBON MELF	2.2	5%	1/5W	
R919	1-249-405-11	CARBON	100	5%	1/4W	
R920	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R921	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R922	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R923	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R924	1-249-405-11	CARBON	100	5%	1/4W	
R925	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R926	1-249-425-11	CARBON MELF	4.7K	5%	1/5W	
R927	1-249-419-11	CARBON MELF	1.5K	5%	1/5W	
RV101	1-230-521-11	RES, ADJ, SOLID 2.2K				
RV201	1-230-521-11	RES, ADJ, SOLID 2.2K				
RV801	1-238-250-11	RES, VAR, CARBON 10K (INPUT LEVEL)				
RY301	1-515-619-11	RELAY				
SW802	1-554-958-11	SWITCH, SLIDE (PC BOARD)(OPERATION)				
T901	1-433-323-21	TRANSFORMER, BIAS OSCILLATION				
T902	1-448-766-21	TRANSFORMER, DC-DC CONVERTER				
T903	1-424-114-11	COIL, CHOKE 22UH				
TH301	1-800-427-00	POSISTOR				
TH302	1-800-427-00	POSISTOR				
TH901	1-800-427-00	POSISTOR				

ACCESSORY & PACKING MATERIAL

1-559-643-21	(Canadian)...CORD (WITH TERMINAL)
1-559-644-21	(E).....CORD (WITH TERMINAL)
3-302-126-01	SCREW, TAPPING (DIA. 5X20)
*3-323-753-01	COVER
*3-323-767-01	BRACKET
*3-323-770-01	INDIVIDUAL CARTON
*3-323-771-01	CUSHION (LEFT & RIGHT)
*3-323-772-01	CUSHION (LOWER) (LEFT & RIGHT)
3-560-041-00	SCREW, HEXAGON
*3-764-869-11	(E)...INSTRUCTION, DBP CAUTION
3-786-288-21	(US).....MANUAL, INSTRUCTION
3-786-288-11	(Canadian,E)...MANUAL, INSTRUCTION
X-3323-703-1	SCREW ASSY

English
88H0263-1
Printed in Japan
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